Gender Classification

In the previous module we solved the emergency classification problem. Similar to the problem, here we have an assignment on 'Gender Classification'.

Problem Statement

In this assignment, you will be working on classifying Facial Images as either belonging to the Male or the Female class. For the same, you have been provided with the Train and the Test dataset.

About Dataset

Male

Female

We have divided the dataset into two parts, the train dataset and the test dataset. You will train your model on the train dataset and check its performance on the test dataset. Below is the description of these two datasets.

Train Dataset

Number of Images = 12196 (70%)

Image Size = 224 X 224 X 3

Test Dataset

Number of Images = 5227 (30%)

Image Size = 224 X 224 X 3

Data Download

You can download the dataset from our Datahack Platform. Several Machine Learning and Deep Learning competitions are hosted on this platform. It gives you the following functionalities:

- You can view and compare your score against that of other participants on the leaderboard.
- You can also keep track of your submissions.

Approach to the Problem

1. Changing the Number of Hidden layers in FC layers.
2. Changing Number of Neurons in Hidden layers.
3. Changing the type of Optimizer used for training. Link to Keras Optimisers
4. Checking out the effect of different loss functions on the result. Link to keras loss functions.
5. Changing the activation function
6. Changing the number of Epochs